Gabriela Kadlecová

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EDUCATION

Charles University, Faculty of Mathematics and Physics, Prague

- Ph.D. in Artificial Intelligence *(ongoing)* — Oct 2021 – present
  - Thesis topic: Optimization and surrogate models in AutoML
- Master's in Artificial Intelligence — Oct 2019 – Sep 2021
  - Thesis: Graph neural networks for NAS performance prediction
  - Graduated with honors
- Bachelor's in Computer Science — Oct 2016 – Jun 2019
  - Thesis: Evolutionary optimization of machine learning workflows

PROFESSIONAL AFFILIATIONS & ACTIVITIES

Institute of Computer Science, Czech Academy of Sciences, Prague — Mar 2020 – now

- Position: Research Assistant
  - Focus: Neural architecture search, AutoML

Machine Learning Lab, University of Freiburg, Freiburg im Breisgau — Jun 2023 – Aug 2023

- Position: Research intern, DAAD Short-Term Grants
  - Focus: Neural architecture search, zero-cost proxies

BISOP – Centre for Modelling of Biological and Social Processes — Apr 2020 – now

- Created a neural network model for vaccine waning – survival analysis
- Collaborated on a multiagent model for COVID-19 spread

NeuronSW, Prague — Jul 2019 – Apr 2020

- ML and IoT startup – predictive analysis of machines based on audio data
- Position: Junior Machine Learning scientist
  - Focus: Audio data analysis, model development

SELECTED PUBLICATIONS

- Suchopárová, G., Neruda, R. (2022). Graph Embedding for Neural Architecture Search with Input-Output Information. Auto-ML Conf 2022: Accepted Papers: Late-Breaking Workshop. Baltimore: AutoML Conference, 2022. Link.
- Pilát, M., Suchoparová, G. (2022). Using Graph Neural Networks as Surrogate Models in Genetic Programming. In Proceedings of the Genetic and Evolutionary Computation Conference Companion (pp. 582–585). Association for Computing Machinery. doi: 10.1145/3520304.3529024.
- G. Suchopárová and R. Neruda, "Genens: An AutoML System for Ensemble Optimization Based on Developmental Genetic Programming," 2020 IEEE Symposium Series on Computational Intelligence (SSCI), pp. 631-638, doi: 10.1109/SSCI47803.2020.9308582.

SKILLS

Programming languages

- **Python**
  - PyTorch, numpy, scikit-learn, pandas
- C++, Bash, C# (intermediate)
- C, SQL, R (basic)

Technologies and other skills

- Git, jupyter notebook, wandb, pytest
- Cluster computing – SLURM, PBS
- Deep learning
  - Semi-supervised learning, graph neural networks
  - Deep reinforcement learning
- Evolutionary algorithms and genetic programming

OTHER EXPERIENCE

- Participated in the AutoML Fall School 2021 and 2022 (member of the hackathon winning teams).
- Teaching experience – 1 semester of introductory Python labs at Charles University.
- Received the student grant GAUK – Surrogate Modeling and Graph Neural Networks in Neural Architecture Search.

LANGUAGES

English: CAE certified (level C2), French: DELF certified (level B2). German: conversational. Japanese: hobby (B1–B2 level).